

VSVS

4/29

Ocean Currents - surface & deep

Density Review

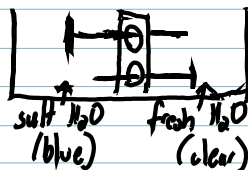
$$\text{Density} = \frac{\text{Mass}}{\text{Volume}}$$

Adding salt to water
makes density ↑

In the oceans, 35 g salt / liter of water

Experiment

Observations



- Fresh water → blue
- Pepper circling surface
- Salt water thru bottom hole
- Fresh water thru top hole

Experiment

Observations

blue water sunk below clear water

Cold H₂O is denser than warm H₂O
Warm H₂O will rise through cold H₂O.
Cold H₂O will sink below warm H₂O

VSVS

4/29

Ocean Currents - surface & deep

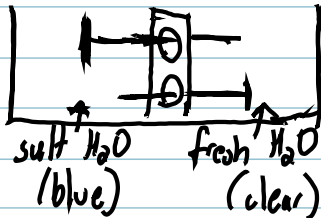
Density Review

$$\text{Density} = \frac{\text{Mass}}{\text{Volume}}$$

Adding salt to water
makes density ↑

In the oceans, 35 g salt / Liter of water

Experiment



Observations

- Fresh water → blue
- Pepper circling surface
- Salt water thru bottom hole
- Fresh water thru top hole

Experiment

Observations

blue water sunk below clear water

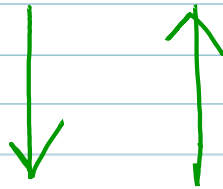
Cold H₂O is denser than warm H₂O
Warm H₂O will rise through cold H₂O.
Cold H₂O will sink below warm H₂O

2/25

Ocean currents

Surface currents -

Deep ocean currents -



because:
- salinity
- temp.

$$\frac{35}{1000} = 3.5\%$$